

Hugh M. Nelson

THE
SOUTHERN PLANTER;

Devoted to Agriculture, Horticulture, and the Household Arts.

EDITED BY C. T. BOTTS & L. M. BURFOOT.



TERMS.

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RICHMOND:

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January

THE JOURNAL OF JAMES W. LANE

OF THE HISTORY OF THE UNITED STATES

FROM 1776 TO 1860

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Agriculture is the nursing mother of the Arts.
Xenophon.

Tillage and Pasturage are the two breasts of the State.—*Sully.*

C. T. BOTTS & L. M. BURFOOT, Editors.

VOL. III.

RICHMOND, JANUARY, 1843.

No. 1.

TOBACCO.

Any thing upon the cultivation of this important plant is of more or less interest to a large portion of our readers; we are, therefore, much obliged to Mr. Garnett for the pamphlet referred to in the following note. It attracted great attention at the time it was written, is nearly out of print, and is worthy of republication. A great deal of it is useless to the old planter, but is not the less valuable to those who are commencing the growth of "the weed." We shall publish the whole in parts, and shall complete it in two or three numbers. We are very desirous that our pages should afford full, complete and correct directions for the cultivation of tobacco, in all its phases; we will, therefore, be obliged to any of our planters who will review and correct Mr. Minor's work.

November 2, 1842.

To the Editors of the Southern Planter:

Gentlemen,—In looking over some old papers the other day, I found a small pamphlet prepared for the press in 1822, by Peter Minor, Esq. of Albemarle, in this State. It is "on the cultivation and management of tobacco from the plant bed to the prize;" and I now send it to you in the belief that you will like to republish it in your paper, as it contains many excellent recommendations on the subject. Not that I am, or ever was an advocate for the culture of this plant, which I have always considered a great destroyer of land, of timber, and of human constitutions; although I do not think quite as badly of it as King James of Scotland, and old Burton, the celebrated author of the *Anatomy of Melancholy*.* But since there is no probability that its

* As this queer old writer has some odd notions about tobacco, which are quite as oddly expressed, I here give them to you in his own old-fashioned spelling:—"Tobacco, divine, rare, superexcellant tobacco, which goes farre beyond all their panaceas, potable gold and philosopher's stones,—a souveraine remedy to all diseases. A good vomit, I confesse, a vertuous hearbe, if it be well qualified, opportunely taken, and medicinally vsed, but as it is commonly abused by most men, which take it as tinkers do ale, 'tis a plague, a mischiefe, a violent purger of goods,—lands,—health;—hellish, develish, damned tobacco, the ruine and overthrow of body and soule."

cultivation in Virginia will ever be discontinued, it is desirable that every thing in regard to it should be made known as generally as possible.

I remain, gentlemen,

Your obedient servant,

JAMES M. GARNETT.

NOTES

On the Cultivation and Management of Tobacco from the Plant Bed to the Prize—according to the most approved practices in Albemarle and the adjacent counties in Virginia.

1st. OF THE CHOICE OF LAND FOR THE PLANT BEDS AND MODE OF PREPARING IT.

A rich virgin loam with a slight mixture of sand is ascertained to be the best soil for raising tobacco plants. Such spots are indicated by the growth of alder and hazle bushes in bottoms and on the margin of small streams, and if the situation has the command of water for irrigation it is on that account to be preferred—the spot being selected, the first operation is to burn it with a strong fire. For this purpose the growth of every kind is cut off, (not grubbed up,) and the whole surface raked very clean. The burning should be done before Christmas, or as soon after as the weather will permit—and if done thus early it cannot be well too heavy, even bringing the soil to a hard cake. The wonderful fertility imparted to soil by fire, has of late years been clearly proved and developed by various experiments in this and other countries, but judging from long established practice, we suppose it is a fact that has been long known to tobacco planters—that this fertility is imparted by the fire, and no ways dependant upon the ashes left by the process is clearly proved from the fact, that the same results will ensue if the ashes are swept off entirely clean. Or take another piece of ground of equal quality, cover it with as much or more ashes, and prepare it in every respect similar, except burning, and plants cannot be raised in it. Hence the necessity and propriety of regular and uniform burning, the want of which is always manifested by a diminutive yellow and sickly growth of plants in those spots not sufficiently acted on by the fire.

After the ground becomes cool from burning, the whole surface should be swept with a coarse

twig broom to take out the coals. In this operation some of the ashes will be removed, but that is of no consequence—it should then be broken up about two inches deep with grubbing hoes, in which operation, and in repeated choppings afterwards with hilling hoes, all roots will be cut and finally got out with a fine iron tooth rake which will leave the ground in proper order to receive the seed.

The most approved time for sowing is about the first of February, the beds previously being suffered to lie and mellow by the frost and snows to that time. But it will do very well to burn and sow after that time, as late as the first of March, taking care not to have the heat so great. The quantity of seed is as much as can be taken up in a common table spoon* for one hundred square yards, and in that proportion. This quantity of seed should be mixed with about one gallon of clean ashes, and half that quantity of plaster of paris, and the whole well incorporated, and then strewed uniformly over the bed at two operations, crossing at right angles to ensure regularity. Cabbage seed for early planting, tomato, celery, and lettuce seed may be sowed in small quantities with the tobacco seed, without material injury to the growth of the plants. After sowing the seed the ground is immediately trodden over closely with the feet, and covered thick with naked brush. If the frost is severe from this time it is common to take off the brush some time in the month of March, before the plants appear, and tread the bed again, and at the same time give the ground a slight dressing of manure. The dung of fowls of all sorts, is sought after for this purpose, which being beaten, is sifted over the bed through a coarse basket or riddle. The brush is then restored, and not finally removed until the leaves of the plants are about an inch in diameter; when the dressing of manure is again applied, taking care to wait the approach of rain for that purpose. Any grass or weeds that may have sprung up in the mean time are carefully picked out. In dry seasons, if the situation admits of it, the bed must be irrigated by training a small stream of water around the edge of it. If not, it should be watered every evening with a common watering pot, or pine bushes dipped in water and shook over the bed until sufficient moisture is obtained.

Under a careful observance of this management, the plants according as the seasons have been favorable or not, will be fit to transplant from the 15th of May to the 10th of June. A

* This quantity of plant bed is generally considered under good circumstances as sufficient to set ten thousand hills in good time. But the prudent planter taking into consideration the casualties of fly, drought, &c. will do well to make a larger allowance. We know of no certain remedy or antidote against the fly which destroys the early plants.

planter thinks himself lucky if he can get his crop pitched by the 10th of June. After that, the seasons are uncertain from the heat of the weather, and the chances of success for a crop are precarious; though it has been known to succeed when planted the middle of July.

Of the Preparation of the Land, and Cultivation of the Crop.

The best tobacco is made upon new or fresh land. It is rare to make more than three successive crops upon the same ground, of which the second is the best, the first and third being about equal. But it is more common to make only two. The new land, after all the timber and brush is removed, and the surface very cleanly raked, is twice closely coultured, as deep as two horses or oxen can pull. After this, hands with grubbing hoes pass regularly over the whole ground, and take up all the loose roots that have been broken by the coulters which are heaped and burned, or removed. One and sometimes two more coulturings are then given, and the same operation repeated with the grubbing hoes, which leaves the land in proper order to be hilled—this is universally done in straight rows at the distance of three and a half feet apart, giving the same distance as near as the eye will permit the other way—in *fresh* land, that is to say, for the second and third crop, the line of the original row, and even the locality of each hill should be preserved. After passing the coulters two or three times between each row, the hills should be made in the same place, the remains of the stalk and roots of the old plant being first removed. It is supposed, from the excess of nitrous particles contained in tobacco, above any other plant, that the partial decomposition of this stubble during the winter, imparts a degree of fertility to the spot which should not be lost by the diffusion and exposure of a general ploughing. It is most advisable too, that the hilling of new and fresh land, should be done as early in the spring as possible, say three or four weeks before planting. This affords time for the hill to settle to a proper consistence, and presents a more extended surface to be acted on by atmospheric influence, which perhaps is greater in the spring months than at any other season of the year.

On the bottom land of our rivers there are extensive alluvial flats, that bear successive crops of tobacco for many years, and some planters resort to highly manured spots conveniently situated upon high land. But in general it is considered bad economy to manure land for tobacco, both because the quantity required for that crop is greater than for any other, and because the quality of the product, as well as that made on low grounds, is coarser in fibre and less marketable. The preparation of such land, however, is the same as that of new ground, except

that the large plough and barrow are substituted for the coulter and grubbing hoe, and the hilling may be a little longer delayed.

If the seasons have been favorable, and the plant beds duly attended to as before observed, the plants will be ready to set out from the 15th to the last of May. It is most common to wait for a rain or *season* as we call it, to perform this operation, in which case the hills must be previously cut off about four inches above their base; but in early planting it is quite safe to proceed without a season, provided it is done in the evening, and the hills cut off at the same time. It is universally admitted that a moderate season is better than a very wet one; and that is considered the best, in which the earth does not entirely lose its friability, but at the same time will bear to be compressed closely about the roots of the plant without danger of becoming hard or baked. Under the most favorable circumstances, however, some plants will fail or perish, and, therefore, the ground must be gone over after every rain until the last of June, to replant the missing hills. It is not important here to describe the mere cultivation of the crop as it respects tillage, it being only necessary as in the case of all other plants to keep the earth light and free from weeds and grass. This is generally done by two weedings, first by scraping a little earth and all the young grass from the plants and then in a short time restoring the same earth, and as much more as will make a considerable hill around each. In old land, and that free from stumps, the single horse shovel plough is used with great advantage as an auxiliary to the hoe.

When the plants attain a proper size, which observation and experience will readily point out, they are to be primed and topped. The priming is merely stripping off four or five leaves at the bottom, leaving about a hand's breadth between the first leaf and the top of the hill. Topping is simply taking out the bud with the finger and thumb nails, leaving the necessary number of leaves, which in general is not more than eight, though the first topping may be to nine or ten leaves to make it ripen more uniformly, and bring the crop into the house more together. For the same reason, the late plants are not topped to so many, falling from eight by degrees as the season expires, down to six and five. A little practice, and slight attention to the manner in which the leaves grow from the stalk, will soon enable a person to perform this operation with great dexterity and despatch, without counting the leaves. All that is requisite after this until the plant is fit to cut, is to keep it from being eaten by the worms, and to pull off the suckers that grow out at the junction of the leaves to the stalk. These suckers put forth only twice at the leaves, but after that indefinitely and continually from the root, and it

is thought injudicious ever to let them get more than a week old, for besides absorbing the nutriment necessary to push forward, and increase the size and thickness of the leaf, the breaking them off when of a large size, makes so great a wound as greatly to injure the after growth of the plant. In general about three months is requisite to perfect the growth of tobacco from planting to cutting.

Of the diseases and casualties to which it is subject, and its tendency to exhaust land.—Tobacco is subject to some diseases, and liable to be injured by more casualties and accidents than any other crop. That growing upon new or fresh high land is seldom injured by any other disease than the *Spot* or *Firing*, which is the effect of very moist succeeded by very hot weather. For this we know of no remedy or antidote. Tobacco growing upon old land, particularly upon low flats, besides being more subject to spot, is liable to a disease we call the *Hollow Stalk*, which is an entire decay and rottenness of the inside or pith, terminating gradually in the decay and final dropping off of the leaves. This disease is sometimes produced by the wounds caused by pulling off overgrown suckers, thereby admitting too great an absorption of water into the stalk through the wound. In land not completely drained, the plants are sometimes apt to take a diminutive growth, sending forth numerous long, narrow leaves, very thickly set on the stalk. This is called *Walloon tobacco*, and is good for nothing. As there is no cure for these diseases when they exist, we can only attend to their prevention. This will at once be pointed out by a knowledge of the cause, which is too much wet, and indicates the necessity of complete and thorough draining before the crop is planted. It may not be amiss here to mention, that tobacco is more injured than any other crop by ploughing or hoeing the ground when it is too wet, and to express a general caution on that head.

The accidents by which tobacco is often injured and destroyed, are high winds, heavy beating rains, hail storms, and two kinds of worm, the ground or cut worm, and the large green horn worm. High winds, besides breaking off the leaves and thereby occasioning a great loss, are apt to turn them over. The plant unlike most others possesses no power to restore the leaves to their proper position, which must shortly and carefully be done by hand, otherwise the part inverted will gradually perish and moulder away. Those who have studied the anatomy of plants can tell us the cause of this, as well as, why nature has denied to tobacco the faculty of restoring its leaves to their proper position. The ground worm, the same which is sometimes so fatal to corn, is ascertained to be the *Larvæ* of the common black bug found in great numbers under wheat shocks, &c. This worm is seldom or

never found in new land, but abounds in old or manured ground—and in some years I have seen them so numerous, as to have from forty to fifty taken out of one hill in a morning. The alternatives are either to abandon the crop, or to go over the ground every morning, when they can be found at or near the surface, and destroy them. The missing hills to be regularly replanted. The Horn Worm is produced from a large, clumsy, grey coloured fly commonly seen late in the evening sucking the flowers of the *Stramonium* or *thorn apple*, commonly called here the *James-town weed*. The flies deposit their eggs in the night on the tobacco, and all other narcotic plants indiscriminately as Irish potatoes, tomatoes, &c. In twenty-four or thirty-six hours the eggs hatch a small worm which immediately begins to feed on the leaf and grows rapidly. Great care should be taken to destroy them while young. Turkeys and Guinea fowls are great auxiliaries in this business, but the evil might be greatly lessened if the *flies* were destroyed, which can easily be done in the night by a person walking over the ground with a torch and a light paddle. They will approach the light and can easily be killed. In this way I have known a hundred killed in one field in the course of an hour.

Tobacco has been reproached as the cause of the general exhausted condition of our lands, of the slow paced improvement in the Virginia system of agriculture; in short as the bane of all good husbandry. This stigma, is, I am persuaded, in a great measure unmerited. It is true, that, like Indian corn, from the frequent and high degree of tillage it requires throughout the summer, it exposes the ground to be washed by hard rains, and evaporated by the hot sun; but the plant in itself is less an exhauster than corn or wheat. A proof of this is to be found in the superior growth and perfection to which any crop will arrive when grown after tobacco, than after any thing else, not excepting clover that has been ploughed in. Perhaps this may be accounted for from the facts, 1st. That the roots and stubble of tobacco left on the ground are more in quantity, and contain more of the essential qualities of manure than those of any other plant. 2d. The plant itself while growing feeds more from the atmosphere than any other: and 3dly. It is not suffered to go to seed, the process in all vegetation which is supposed to make the greatest draft on the fertility of the earth. Neither is the culture of tobacco incompatible with a proper rotation of crops, and an improved system of husbandry, for we find as extensive and successful efforts at improvement made in the tobacco region, and by tobacco makers, as in any other section of our State.

(To be continued.)

ROOTS.

We ask the attention of the South to the following communication. It comes from a thoroughly practical man, and affords a better essay upon the subject than we could hope to obtain at home. We have visited Mr. Bement's farm, and had ocular evidence of his superior skill and management. It would not do to subject all of our agricultural writers to the same test.

Three Hills Farm, Dec. 6, 1842.

Messrs. Editors,—From the very flattering manner in which you have introduced me to the readers of the "Southern Planter," I cannot resist the call to furnish you with a statement of the treatment, culture, and produce of my carrot patch and field of Sweetees.

I am not so vain as to think I can furnish any thing new on the subject, to your readers; but a plain, practical, matter-of-fact account may not be uninteresting to them.

Although the root culture has been gaining favor, in this country for several years, still, in my opinion, it has not received that attention it deserves. My soil is a loam, some parts inclining to sand and some to clay, and what is termed here, sandy-loam and clay-loam, and well adapted to the growth of roots, particularly carrots and ruta bagas. I have cultivated roots for my stock, for the last ten years and I have found no crop that pays better, for the expense of cultivation; none that abstracts less from the soil, or that leaves it in better condition for a succeeding crop. I have never failed in procuring a good crop of barley, and after ruta bagas, grass seed always *take well*. I have been less successful with oats, as the richness of the soil causes a too luxuriant growth of straw, whereby they lodge and do not fill so well.

You will recollect that my carrot patch was near my house; I call it my *accommodation* crop, from its being near by and can be worked at odd times; besides it is the scene of my labor! Do not start, gentlemen, for I assure you I do not belong to the silk-stocking gentry. If you had made your visit in the summer, you might possibly have found me in my "frock-and-trowsers" in the very midst of them, and the perspiration profusely rolling off my face in drops as large as peas.

To ensure a good crop of carrots, and it will apply equally well to all crops, it is necessary to have the soil not only rich but well worked and pulverized. As soon as the soil is sufficiently dry in the spring, I plough as deep as possible, and after one or two weeks, I haul on at the rate of sixty cart loads, (equal to thirty wagon loads,) of compost manure, and spread evenly, and harrow it thoroughly, when the plough is again put on and a shallow furrow turned, just

sufficient to cover and mix the manure with the soil. It is now suffered to rest until the seed is to be sown, which in this climate will be from the 10th to the 20th of May. Previous to sowing it is thoroughly harrowed, and then thrown into ridges, twenty-seven inches apart, which is done by turning two furrows together. A light roller is then passed over, flattening two ridges at every turn, the horse walking between them. This leaves a flat surface of about four inches wide for the drill, which follows and deposits the seed in the centre about half an inch deep; a small roller attached to the drill, follows, covering and compressing the earth to the seed, which completes the operation.

As soon as the plants are about an inch high, they are wed and thinned, which is considered the most tedious operation, which is rendered easy and expeditious by what we term the "push and pull" system. In the first place we run the cultivator, with the wings closed, between the rows, and then by standing in the furrow, with a small narrow hoe, say three inches wide, push one side of the plant and pull the other side into the furrows, which will leave the plants about four or five inches apart, which I conceive to be the proper distance. After the second working, which is merely running the cultivator between them again and cutting up the weeds, the ridges vanish and the soil becomes nearly level.

The advantages of cultivating on ridges, are, the soil is warmer and dryer, the plants are more easily distinguished, the weeds do not grow as vigorously and are much more speedily removed. The great secret in making good root crops is in thorough cultivation and a generous supply of manure.

You will recollect the carrot I cultivate is the white Belgian variety, which I esteem the most profitable on account of the great produce and the ease with which they are harvested. Unlike any other variety, from three to four inches of the root rises above the soil, which affords greater facilities in drawing, which can be done by grasping them with the hand, resembling in that respect the mangold wurtzel.

I gathered them on the 14th of October, which was accomplished in the following manner.—Each man took two rows, pulling and laying the tops all one way in a row. After they were all pulled, the tops were struck off at one blow with a knife made of a piece of an old scythe, and the roots of four rows were thrown into one; the cart followed and the roots were tossed into it with the hand. The crop obtained from the patch, which is about one-third of an acre, was 305 bushels.

It is impossible for me to estimate the expense of this crop, as the labor was done at odd times, in the morning before breakfast, when the main work was at a distance. In comparison with

the ruta бага, I judge they cost about one-third more, which would bring them at about nine cents per bushel.

I agree with Mr. Botts in estimating their value. For horses and milch cows, I consider them superior to any other root. Horses become very fond of them, and fed once per day with them, their bowels are kept loose, and the hair becomes glossy, giving them a lively and healthy appearance. Cows eat them greedily and their milk is of the richest color, and the butter of superior quality. They are in such high estimation in this section, that a gentleman in the city paid me twenty-five cents per bushel for a load of them to feed his cow.

From the amount taken from the small piece, as above, I am well persuaded, that one thousand bushels, every thing favorable, can be grown on an acre.

My method of cultivating the ruta бага is similar in several respects to that of the carrot. They require a lighter soil and delight in a sandy loam, and will bear as much manure as any other crop, not even excepting corn. I have grown good crops on a sod, by turning under forty loads of fresh yard manure. I prefer, however, to have them succeed potatoes, which was the case with the field you saw in October last.

Last spring a compost of yard manure and the refuse of a glue factory, consisting of lime, bones, wool, hair and bits of pelt, was applied, say twenty loads to the acre, carefully spread after the first ploughing, and turned under with a shallow furrow and thoroughly harrowed, and mixed with the soil—then thrown into ridges twenty-seven inches apart, the tops flattened with the roller, and the seed deposited with the drill, &c. The after culture, with the exception of leaving the plants from nine to ten inches apart in the drills, was the same as that of the carrots.

There is one fact in regard to this crop which I never noticed until last summer. It so happened that a part of this field was not wed and thinned for some days after the other, and the plants and weeds had attained considerable height before they were worked, and caused about double the labor to finish them. On pulling we found them on this part of the field, less in size, necks long and tops large—termed "necky." On reflection, the same has happened before, and I could not account for it. I have also, heard others complain of the quality of their seed, that the plants would not bottom, &c. I have seen some of these patches and recollect that they were very close and there was apparently a great strife between the plants and weeds for the ascendancy.

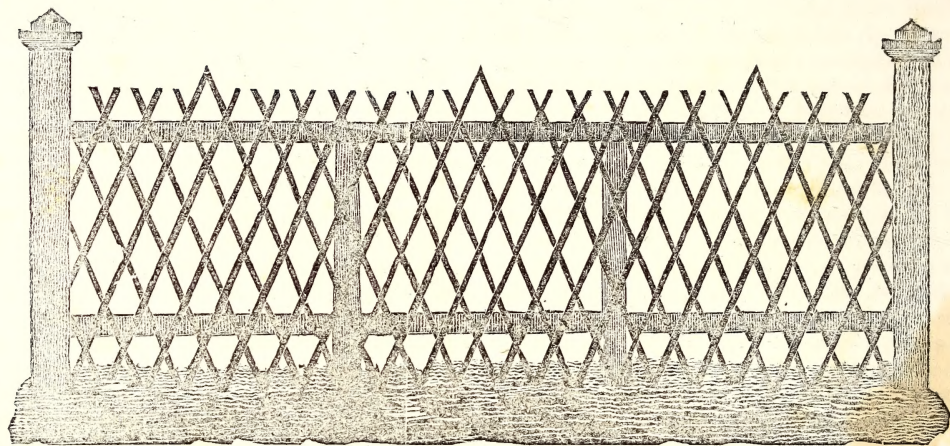
I finished pulling my crop on the first of this month, and they amounted to 2,355 bushels, and as near as I can make it out, the expense of cultivation would not vary much from six cents per bushel. We think there was not far from

three and a half acres. I feed them to my cattle, sheep and swine; and for feeding calves the first winter, they are invaluable, carrying them through in fine condition, and promoting their growth wonderfully.

In storing them I fear the heat more than the frost. I have about 1,600 bushels in a cool cellar and 600 in heaps covered with straw and earth, for feeding my ewes in May.

C. N. BEMENT.

A FENCE.



We noticed at the North a style of enclosure for yards and gardens that struck us as combining neatness and economy in a high degree.—We have attempted to illustrate it in the engraving.

The posts and rails are put up in the usual form of those to which palings are nailed, but the slats instead of being put on perpendicularly are placed diagonally and crossed so as to show perfect diamonds in the interstices. These slats are ripped with a circular saw out of the slabs and refuse timber at the saw mill; they are an inch wide and three-eighths or a half inch thick, and when crossed in the manner represented, form a very neat and substantial fence. They are nailed on to the railing just as they come from the saw, and are covered with a coat of pitch which conceals the roughness, affords a good black color and renders it extremely durable. Whitewash might be substituted for it.—Various patterns are used according to the fancy of the owner, but we think the one we have represented combines strength with neatness in a higher degree than any other we saw. If the reader, in his next journey to New York, will take the trouble to cast his eyes to the right as the cars approach Amboy, he may catch a hasty

glance of the enclosure from which we made our sketch.

We will attempt an estimate of the cost of this paling. The slats will average about four and a half feet in length and will cost here probably three dollars a thousand, (at the North they are furnished for less;) they are placed about four inches apart; a thousand will, therefore, cover twenty pannels of eight feet, allowing for waste; the rails will be worth about four dollars and the posts about three dollars and fifty cents. The tar may be estimated at one dollar and the nails at fifty cents—making a total of twelve dollars for the materials, at a high estimate, in one hundred and sixty feet of paling. The workmanship may be executed by any man that can dig a hole and drive a nail.

Who would be without a neat enclosure to his yard when it can be had at so cheap a rate?

For the Southern Planter.

MUD.

Messrs. Editors,—In the November number of the Planter "A Subscriber" notices a communication, which was published over my name, relative to *river mud* as a manure. He says that "similar experiments have been made under his

observation with *swamp mud* and he regrets to say that the effect cannot be seen." The river mud differs essentially from swamp mud, as much, I suppose, as one tract of land differs from another in fertility. The former is brought principally from the mountain region by freshets, and no doubt has lime as well as other minerals in its composition; whereas, the latter is invariably formed from the washing and deposits of the neighborhood. The two experiments are entirely different, nor should I have considered it necessary to reply, if my communication had not been mentioned. If, however, any doubt still exists upon the mind of "A Subscriber," I can refer him to Major Charles Yancey, who saw the mud put on the land, and saw the crop several times whilst growing; and so much pleased was he with the fertility imparted to the land, that he forthwith proceeded to use the river mud in the same manner. Notwithstanding the difference between swamp and river mud, "A Subscriber," I think, must be mistaken when he supposes that "no advantage is derived from swamp mud and the richest ditch banks," and that after they "had been well pulverized with the frosts of winter, and spread broadcast, or put abundantly in the hill they will not produce." It appears to me, that if rich soil is put on poor land, the latter must be benefitted thereby: under this impression, I had six or eight thousand loads of earth removed from the ditch banks, during the last year, and put on the poorest parts of my low grounds which I intended for corn, and the crop fully realized my anticipations; and this year I have pursued the same course, and expect to receive a corresponding benefit. I also had river mud hauled on my tobacco land, but the freshet in July destroyed the crop, and I intend to continue its use as long as I perceive the expense and trouble of removal is paid by the subsequent crop.

If "A Subscriber" will carry the mud from his bogs, in the fall to his stable yards, his hog pens, cattle sheds, and farm pens, to be trodden by the stock and mixed with their manure, or if he will form a bank of his bog mud, lime, and dung from his stables, in alternate courses, he will in the spring have fine compost, the advantage of which put on any crop will be perceived without difficulty. If this discussion is to be continued, I hope "A Subscriber" will oblige me by appending his name to his next communication.

Respectfully, yours,

RICHARD G. MORRIS.

Buckingham, Nov. 30, 1842.

To the Editors of the Southern Planter:

Gentlemen,—In the volume of the New York State Agricultural Society, which you were kind enough to loan me a few weeks since, I was

particularly struck and at the same time, much mortified, by a letter from James M. Garnett, Esq. in which he undertakes to describe the progress of agriculture in Virginia. Here is a work, the intrinsic excellence of which, must secure for it, a circulation of almost unlimited extent, in which, as I think, the agriculture of Virginia, is most *grossly*, though I doubt not, *unintentionally* misrepresented. Although even for the honor of his native State, I could not wish Mr. Garnett to exaggerate her advantages, still less do I think it consistent with good taste to dwell, as he has done, upon what are surely nothing but individual cases of mismanagement, and these too, confined to a time long passed by. If Mr. G. had told us, in the beginning, that his object was to describe the state of agriculture, *as it existed in the time of his grandfather*, we might have been prepared for the sarcasm and ridicule, which pervade his whole piece.

After describing the cattle, poor and lean, standing in the corners of fences, with their backs drawn up in the shape of a bow, Mr. Garnett says—"But let me return to the cattle of the olden time, of which I have a few more reminiscences to add. In those days, they were so utterly neglected, that it was quite common for the multitudes starved to death every winter, to supply hides enough for shoeing the negroes on every farm. This was a matter so generally and constantly anticipated, that my own grandfather, as I have heard from unquestionable authority, was once very near turning off a good overseer, because cattle enough had not died on the farm, of which he had the supervision, to furnish leather for the above purpose."

Now, to say nothing of the want of delicacy, in publishing to the world so ridiculous an incident about a venerable ancestor, I would respectfully ask what has this anecdote to do with the *present* state of agriculture in Virginia? Under different circumstances, I might have joined in the laugh, which it was probably Mr. G.'s intention to raise: but when I find it associated with *Virginia*, my mother as well as *his*, I could feel no other emotion but that of surprise and mortification.

But why does Mr. G. in such a treatise as his professes to be, drag to the light an incident, which (judging from his own age) must have transpired nearly two hundred years ago? Does he intend to insinuate that such a state of things generally prevails at present? So far from this, I do seriously doubt if a similar case has occurred since his grandfather paid the last debt of nature. Mr. Garnett is too good a writer, and too good a speaker on the subject of agriculture, to admit the idea, that he is describing the state of things on his own farm. And if it exists any where else, I candidly declare I never witnessed or ever heard of it.

With these remarks, I will take the liberty of

saying to Mr. Garnett, that if he will leave lower Virginia, and pass through the middle and western parts of the State, he will find as good native cattle, as can be found in New York or New England. Here too he will find a number of the finest imported cattle by which the farmers are endeavoring to improve their native stock. In fact it is not necessary for Mr. G. to go so far. If he will take the trouble to visit his neighboring county of King & Queen, he will find some full blooded Durhams, and he will find also many other cattle which share deeply in that celebrated cross. Within a short distance of my residence (I live in lower Virginia) I know of several Durhams, Ayrshires and Devons, all certified to be of the genuine stock, and these are diffusing themselves with great rapidity throughout the country.

But if our cattle are thus starved and thus suffer, how is it that such multitudes of the very best beeves are annually driven to the Baltimore and Philadelphia markets? Large droves also are constantly coming to lower Virginia seeking for a market, whose appearance clearly indicates any thing else than that they have been "on the lift." After this, I think Mr. G.'s candor will prompt him to admit, that his statement is a *caricature*, not a faithful picture.

Mr. G. also comments with great severity upon the draught horses of Virginia. The idea conveyed is (for I think it needless to quote his words) that the *race-horse* is such a favorite among Virginians, as to absorb all their care.—Now I am no greater admirer of the race-horse, considered as such, than Mr. G. is. In fact, I do most cordially sympathise with him in all the ridicule which he heaps upon Virginians on account of their propensity to this amusement. Yet I must in candor admit, that the chief improvement, which this noble animal has received among us, has been through the race-horse.—The best horses I ever saw for the draught or saddle, were got by the race-horse; and our most sprightly and useful mules are out of our blooded mares. If the race-horse then has occasioned a degeneracy among *men*, he has certainly much improved his own species.

But there is another charge of still graver import, which I find in Mr. G.'s letter. It is in these words—"In the tide water portion of Virginia, the average product of Indian corn per acre, does not, I think, exceed fifteen bushels, although eight or ten times as much has been made on a few farms; the average crop of wheat, in all that portion of the State of which I have been speaking, can hardly be estimated higher than five bushels per acre, if so high."

All the people then in this part of Virginia must be in a starving condition. All farmers agree, that when the average of corn falls below twenty bushels to the acre—or of wheat, below eight bushels—then these articles do not

pay the expenses of cultivation. If, therefore, Mr. G. has stated the thing correctly, then all Eastern Virginia is doing a losing business.—This reminds me of an anecdote which I feel strongly tempted to detail. An Irish merchant was urging a customer to buy a certain piece of goods, assuring him that he "constantly sold his wares for less than cost." "Why then are you not a ruined man?" "The reason is a very plain one," said he—"it is because I do a *very large business*." The reason then why we are not all bankrupts, in this section of country is, because we do this *ruinous* business on so large a scale.

Now I pretend not to know what the *precise* product of these articles is. But judging from facts, I feel no hesitation in saying that Mr. G.'s estimate is far too low. Corn is considered as one of the chief staples of lower Virginia, and wheat, of upper Virginia. If the product of these articles were as low as Mr. G. has represented, then it is clear to my mind, that instead of being considered as *staples*, people would cease to cultivate them entirely. But there is another fact, which bears strongly on this subject. We raise in Virginia as much corn and wheat as we need for our own consumption, (and this is a large amount) and besides this, we have an immense surplus, which we send to a foreign market. I wish I knew how many thousands of bushels of corn and wheat, and how many tens of thousands of barrels of flour, are annually shipped from our State. Some estimate may be formed of the magnitude of this business, when I state that twenty-five thousand bushels of wheat may be ground in a single mill in Richmond, in a day. Mr. G.'s estimate is, therefore, far too low.

But then the question recurs, why should Mr. G. who is confessedly *Virginian*, every inch of him, give this statement of the agriculture of his own native State? To this I reply, that he is a *facetious* old gentleman, an excellent writer, a pleasant speaker, and in addition to this so fond of his *joke*, that he will indulge it, even at the expense of things dearest to his heart. I would not be at all surprised if in writing this letter, his object was to hoax Brother Jonathan, of New York. Hence his details of *grandfather* memory, and hence his statements of products so low, that they must necessarily issue in the ruin of any people. And yet these very people who have no bread, nor butter to put upon it, are every year sending large quantities of corn, wheat and beef to feed Brother Jonathan of the North.

VINDICATOR.

SEEDING GRASS.

Mr. WILLIAM CARTER, who is an extensive grass grower on Chickahominy, and a thorough

ly *practical* man, informed us, in a conversation a few days since, that having read in the *Planter* an account of the new mode of seeding grass, practised in some parts of Massachusetts, and highly recommended by the Editor of the "*Ploughman*," he determined to try the experiment. Accordingly, in the month of September, 1841, he inverted the sod of his old meadows, and harrowing the surface, he resowed his grass seed. The result was, that, in the summer of 1842, he cut the finest crop of hay (timothy and herdsgrass) that he ever took from his land. He has abandoned, forever, the idea of cleaning his meadows by the cultivation of corn or any other hoed crop, the expense of which is much greater, and the profit much less, than of grass.

Mr. Carter states that the turning under of the sod had the singular effect of completely smothering the natural and noxious growth, whilst the timothy and herdsgrass put up through it almost thick enough to prevent the necessity of re-seeding. We confess we do not understand the philosophy of this, but should rather have feared the reverse; but facts sometimes laugh at philosophy, and Mr. Carter's statement is corroborated by the evidence of many northern farmers.

There is no subject we take so much interest in, ourselves, and none in which we more desire to excite the interest of our readers, than the cultivation of grass. Any information or communication upon the subject, is, therefore, received with peculiar favor.

EXPERIMENTS WITH PLASTER AND GYPSEOUS EARTH.

The following report of experiments, made by Dr. Robert Harrison, of Prince George, was presented to the consideration of the Agricultural Society at Garysville:

"Whilst very discordant opinions prevail amongst others as to the merits of PLASTER, I have uniformly found the happiest effects from its use on my land.

"In March, I selected two pieces of adjoining land, believed to possess equal fertility; the one part was dressed with plaster, (sulph. of lime,) in the proportion of one bushel to the acre—the other had no application of any kind. The soil was a loam adapted to the production of both wheat and corn. The quantity of land selected for experiment contained in each piece seven hundred and eighty-four square yards. There was

soon evinced a rapid improvement in the appearance and luxuriance of the plastered clover, which continued to progress until it was fully grown. At this time, the clover on each piece was neatly cut, suffered to wilt by exposure to the sun, then put up in cocks; the succeeding day, the hay was opened, exposed to the atmosphere sufficiently to dry it, and the quantity on each piece of land was weighed separately, and afterwards housed with the following result:—That portion, which had had a dressing of sulphate of lime, weighed 747 pounds, and the other portion, without this application, 428 pounds. Thus, it is apparent, that by an outlay of about fifty cents an acre, an additional product was realized of almost two thousand pounds of clover hay, besides an additional increased quantity of vegetable matter in the roots, which it is fair to infer were enlarged to produce the more luxuriant and vigorous growth. This is not a solitary instance of its value, but it is corroborated by additional testimony in our vicinity.

"Experiment 2. At the bottom of my marl, lies a tenacious, apparently homogenous substance, blue in appearance, and of a soapy character, which I had applied as a top-dressing to oats on land remarkably light. The amount applied was not ascertained, but upon a rough estimate I would say two hundred bushels per acre. On adjoining land, of similar texture, almost a perfect sand bank, clay was applied in the proportion of three hundred bushels per acre, also as a top-dressing after the oats were seeded. After these applications of clay and what I will denominate gypseous earth, the land was sowed with clover, and previously there was a growth of the Eastern Shore bean, a plant sometimes called the *magadabay bean*. Now for the result. On the land that had been clayed, the clover seemed to struggle for existence; it was sickly and pale and nearly all died, the past summer; the bean grew but sparingly. On the land which had received an application of gypseous earth, the clover took finely, grew luxuriantly, and surpassed in size and beauty any on the farm. Soon after harvest, it was in bloom and more than knee high. I must confess the result surprised and also delighted me, and the effects on the bean plant were equally gratifying, for its growth on this portion exceeded that on the other, five if not ten times, both in size and weight.

"I am fully of the opinion, with which all of my neighbors concur, that this earth produced more beneficial effect, than would have succeeded the application of an equal quantity of the best rotted stable manure. This substance engaged my attention about eight years ago, when I forwarded a specimen of it to the Professor of Chemistry in Philadelphia, desiring its analysis. I was informed, according to my recollection at this moment, that it contained sulphate of iron,

alumina, and some other ingredients not now remembered; but his conclusion was, that it possessed no fertilizing property. This destroyed the faint hopes I had entertained of it, but I afterwards had some of it hauled on light land, which was put in corn. I discovered no improvement in the corn crop. Even this year I discovered no improvement in the oat crop.—Last year I had some dropped around the growing corn, perhaps about fifty hills, with no manifest indication of improvement. Although I found, in each instance in which I had so sparingly used this earth, no improvement in the quantity or quality of the growing crop, I afterwards discovered, about where it was carried out, a greater growth in the size and a richer appearance in the color of the Eastern Shore bean; but I entertained great doubts whether this was to be attributed to this earth or other unknown causes. I determined, however, to try it on young clover, with the happy results above described. About the time of this application, I knew that the gypseous earth on the banks of James River had been used most successfully.

Let it be remembered that this earth had been used by me in every instance on land that had been previously marled, that is treated with earth containing carbonate of lime. It requires no great stretch of mind to suppose, that as sulphate of iron and alumina exist in the one article, and carbonate of lime had been previously applied, that these ingredients become decomposed and produce sulphate of lime and carbonate of iron, while the alumina gives the tenacity in which our light lands are so deficient. The sulphate of lime (or as it is commonly called plaster) is known to act very beneficially on clover sown on light land. And this fact may afford a clue to a satisfactory explanation of its mode of action.

METHOD OF CAUSING CABBAGES TO HEAD DURING THE WINTER.

In the fall of the year when it is time to gather cabbages, we always find more or less of them that have not formed any heads. They may have grown well, and have a large stock of leaves, but have not closed up in the form necessary to make a good, solid, compact cabbage.

William Vance, Esq. of Readfield, has practiced for many years the following method, which effectually closes these loose leaves in the course of the winter, thereby furnishing him with a supply of the best kind early in the spring. In the fall of the year, just before the ground closes up he gathers all the cabbages which have not headed, together. He then digs a trench eighteen inches or more, deep, and of sufficient width to admit the cabbages. He then closes the leaves together by hand, winding a wisp of straw or something else around them to keep

them together, and then puts them in this trench, with heads down and roots up. He then packs straw or leaves and earth snug about them, and rounds up the earth over them. The trench should be dug in a place where the water of the rains and snows runs off and will not stand about them. A board, or couple of boards, nailed together in the form of a roof and put over the mound, may be useful.

In the spring of the year open your trench and you will find that the cabbages are all headed firmly together, and if the water has not got in, will be solid and hard. Mr. Vance has had the goodness to send us a few heads which he has formed in this way, which were very nice. By following this plan, we not only preserve the cabbages well during the winter, but save much of the crop which is not considered worth much.—*Maine Farmer.*

WHEAT MANURED WITH GLASS.

Mr. William Partridge, in an article in the Cultivator, suggests that pounded glass may be applied with great benefit to wheat lands. The silicate of potash, which is required by the wheat, and which is furnished by none of the usual manures, would be thereby supplied. He thinks that in this way any rich field might be made to yield sixty or seventy bushels of wheat to the acre. He reckons that about a barrel might be required to the acre, and this, he says, can be obtained in New York, ground as fine as flour, for \$1 75.

For the Southern Planter.

CORN, ARTICHOKEs, SHAMBLE MANURE, ARTIFICIAL WATERING PLACES.

I have heretofore been in the habit of planting my corn when the oak leaves have attained the size of a dollar, but am satisfied that in the general I have lost by the practice. The later the planting, the taller the corn is disposed to grow; and the taller, the more shade; consequently the less produce. The rows of my corn are generally five and a half feet wide, the distance in the row varying from two to four feet, according to the quality of the ground, with two stalks together; yet, in consequence of the dense shade, on my improved grounds, neither pumpkin, cymelin, nor pea can come to perfection; and I defy a weed or spire of grass to lift its head amongst such corn after it begins to silk and tassle. I have, therefore, determined to plant earlier; provided, nevertheless, that my ground shall first have been put in good condition for receiving the seed.

I have had two years experience in growing and feeding Jerusalem artichokes. Last year,

they were planted in rows four feet apart, and cultivated as corn. About the middle of October, my fattening hogs were turned into the lot and fed with corn, each rooting his own artichokes, which served not only for food, but water also. In May last about as many artichokes sprung up as I could have wished, and in June the weeds were pulled out by hand. The hogs are now again at work for their living, and so expected to be each fall until toward Christmas, when the sheep are turned into the lot for the winter. Thus, a lot of half an acre answers the triple purpose of growing artichokes, hog pen, and sheep cot; and must shortly be as rich as desirable. I design hereafter to give the lot a thorough tillage with the coulter in the latter part of April, and when the artichokes are twelve to fifteen inches high to cut out the weeds with the hoe, and thin to about eighteen or twenty inches. The artichoke grows to about the same height of corn, consequently, smothering every thing beneath after they get a few feet high.—The produce on the half acre is perhaps six hundred bushels.

I think I have heretofore informed you that I had last year made and spread seventy-two ox cart loads of shamble manure on a meadow. I have now the pleasure of informing you that the portion of meadow on which this manure was spread, yielded two heavy cuts of grass, and would have been cut the third time, had not the fall been unusually dry. The grass consisted of a mixture of greensward, (Kentucky blue grass,) and red clover, which seem to agree well, in every way. The contents of the vault of this year was cast out a few days past, and amounts to about fifty loads; and no sooner out than filling again. I am now enlarging the vault, so that it may contain about one hundred ox cart loads of decomposed manure. My ingredients are bog earth, saw dust, mould, leaves in a state of decay, ashes and flesh*. The first layer is earth or saw dust, second flesh, third ashes, on which earth or saw dust is immediately cast, and the course continued. Not only my own, but some of my neighbors' dead animals are vaulted by me, and thus the buzzards are made to seek their meat in other quarters. The larger animals are cut into pieces, and spread, and such a quantity of earth or vegetable matter cast on as to secure them against exhalation. I have now on hand eight or ten old sheep, which I have directed to be shorn, then killed and their carcasses deposited in the vault; and thus I intend to treat every animal which may be unprofitable and unsaleable. A horse, which from any cause has become worthless, should

* Last year I used some lime in my vault, but this year I have used none. The price when delivered at my residence is about thirty cents the bushel, which is more than I can afford to give, otherwise, I would use it in considerable quantity.

not be palmed on the ignorant, but killed and converted into manure, and the supernumerary dogs could add much to the muck heap.

I have noticed that in the last number of the *Cultivator*, the Editors remark that they have no faith in the plan of raising water by means of digging a hole in the earth, placing a barrel in the hole, and filling this with small stones.—Now I do not know that a barrel may have the power of extracting water, but I will tell you what I do know, and that is, water is easily extracted whence it is wont to come, barrel or no barrel. On the first day of March, 1841, I went with some hands to the top of a considerable mountain, and began to clear a tobacco plantation. No water was to be found on or about the premises, but I had faith, and faith produced works, for by digging a hole eighteen or twenty inches deep, where I had once noticed the earth to be more moist than elsewhere around, I brought forth an excellent and never-failing spring. This spring is within the plantation, and about one hundred yards of the top of the mountain. The branch from this spring does not run more than ten feet before it is totally absorbed by the porous mountain earth, and nothing is again seen of it, at least between its exit and the foot of the mountain; nevertheless, by digging I believe that I could tap it in a dozen or more places. There are many handsome building sites in mountainous regions, where water naturally is not to be had; but by digging or boring in places where the earth is generally in a moist state, I have no doubt but that a supply can be obtained. For the purpose of boring, I would use a bar of steel two or three inches square, directing the bore horizontally in very steep ground, and in others with a dip of twenty to thirty degrees.

ZA. DRUMMOND.

Dec. 4, 1842.

NEW FASHIONED POTATOES.

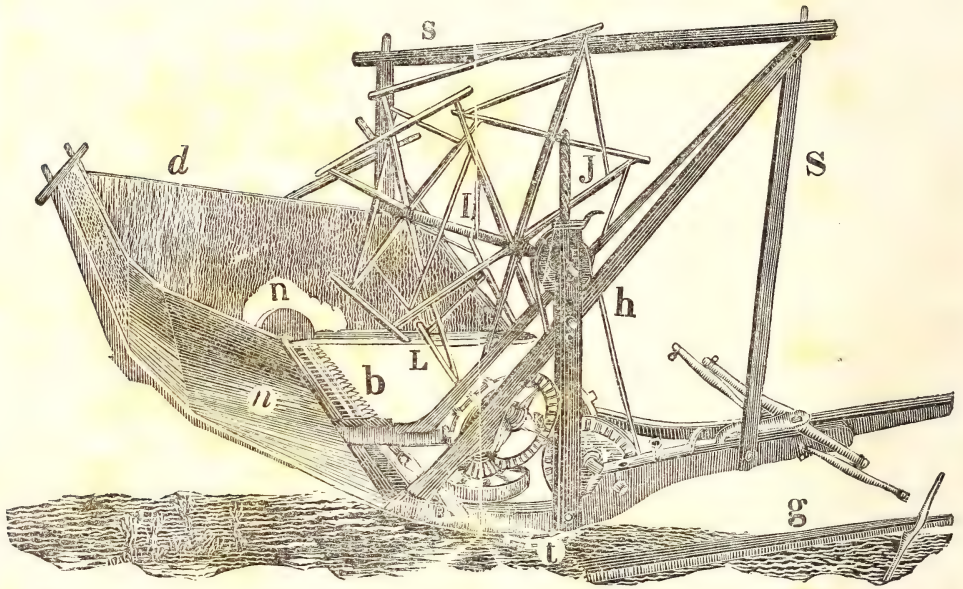
The *Wheeling Daily Gazette* speaks of a new species of the potato plant that has just been imported from South America. The fruit grows on vines, like pumpkins, and will do to make handsome arbors; a single seed potato being sufficient to cover a verandah. The beauty of this above-ground vegetable, is, that you can pick out the finest potatoes without damaging the plants, and leave the "small potatoes" to grow bigger.

POLL EVIL.

This disease has generally been considered incurable, but Mr. SAMUEL TERRILL, of Caroline, an old gentleman of the highest respectability, called at our office a few days since, to say, that he had found an unfailing remedy in

the little evergreen, commonly called the *ground ivy*. The leaf is gathered and dried before the fire until it can be pounded, when a table spoonful is mixed with an equal quantity of slacked lime, and the swelling, having been laid open to the bone, the mixture is laid in the wound, and kept in place by a bandage. Mr. Terrill says, that he has used it himself, and that he has known it frequently used by others, and that, in no instance, has the first application failed to effect a cure. A specimen of the plant may be seen at our office.

M'CORMICK'S REAPING MACHINE.



- b. The fingers.
- d. The canvass for saving the grain.
- n. The small ground wheel on the offside.
- z. The platform on which the cut grain is deposited.
- h. The band which drives the reel.
- J. A screw by which the reel is raised, and the band tightened.
- g. A part of the tongue.
- L. One of the ribs of the reel.
- o. The fly wheel, to the crank of which the driver of the blade is attached.
- S s. Braces for the off reel post.
- t. The main ground wheel, which is shown in two other places.

It is not often that we present our readers with an engraving as complicated and difficult of comprehension, as any drawing of any such

machine must, necessarily, be; but the universal popularity of this Reaper, and its extreme importance to the grain growing community, have induced us to tax the ingenuity of our readers in the engraving more than is our wont. We have published several testimonials of its value heretofore, but, within the last few weeks, we have had the model at our office, and held personal conversations with gentlemen who have had it in use. We had entertained fears that any machine for reaping grain, that did its work well, would be of too complicated a nature for the mechanical skill of a farmer, and too delicate for the racking which hauling over rough ground would necessarily produce; but an inspection of the model, and the testimony of others, satisfied us that the ingenuity of Mr. M'Cormick has overcome both of these difficulties. Mr. Wm.

M. Peyton and Dr. Braxton informed us, that they had not experienced the slightest difficulty in the management of the machine, and that it did its work most effectually, under the most disadvantageous circumstances. Mr. Peyton says it will cut fifteen acres per day, without leaving a single stalk standing in the field. He considers that the wheat saved in a large crop, will more than pay for the machine.

We will endeavor to describe its operation.—The machine weighs about six hundred pounds, and is drawn forward by two horses, which are amply sufficient for the draught. It rests upon two wheels, a large and strong one at (*l*), a smaller and lighter one at (*n*). On the shaft of the large wheel, is placed a drum, a band from which passing around the pulley (*x*) gives motion to the reel; upon the same shaft, is also placed a bevil wheel, that works into a pinion on a shaft lying at an angle of about forty-five degrees. Upon the other end of this shaft, another bevil wheel is placed, which works into a pinion on an upright shaft, giving a horizontal motion to the fly wheel (*o*), to the crank of the driver or pitman of which the knife is attached. The knife itself, the cutting part of which is six feet, is formed with a sickle edge, and works under the teeth upon an iron bar, beyond which it projects about a quarter of an inch; it is sharpened by merely grinding down the upper surface; but this is not required in a single crop. The teeth, represented at (*b*), are shaped like spear heads; as the machine is drawn forward, the stalks of the grain are compressed between them, and falling behind the shoulders, are held for the operation of the knife: the ribs of the reel serve also to press the stalks against the knife, before they are cut, and to deposit them upon the platform, afterwards. The raker walks along by the side of the platform, and draws the grain off fast enough to keep six or seven binders at work. As this though is tough work, he changes with the, who has nothing to do but sitting on the back of the near horse, to guide the machine by keeping his left foot touching the edge of the standing grain.

The stubble may be left from nine to thirteen inches high, by raising or lowering the knife.—This is effected by simply changing the holes of the pins which connect the tongue with the body of the machine: the other end of the tongue is fastened securely, and steadily, to the breasts of the horses; and as the machine tilts,

like a cart, upon the wheels, it may of course be lowered or depressed in the manner we have pointed out. It may be as well to mention here, that although we have appropriated a pretty large space to our own tongue, that we could not find room for Mr. M'Cormick's, in the engraving, without cutting it in two, which is never done in the machine itself.

In conclusion, we will state that several of the most judicious farmers in the State have, after a careful examination, ordered machines for the coming harvest. It is also proper to state, that we have a small, a *very small*, interest in this machine, having undertaken an agency for the proprietor. The price is one hundred dollars, with the cost of delivery added.

WINTER FOWLS—WINTER EGGS.

Some of our New Jersey subscribers are desirous to learn of us the best modes of keeping hens through the winter in order to insure a good batch of eggs.

1. An important point is to have good fowls; fallow hens are a great nuisance at any time.

2. Keep no old hens; four-year-old poultry is quite tough enough.

3. Let hens have a warm place to lay and to roost in.

4. Let them have enough to eat—a supply always by them. This will prevent starvation and surfeit. Hens eat too much at a time to lay many eggs if they have long been kept hungry.

5. The food of hens should contain lime, as lime is essential to form the egg-shell. Wheat, buckwheat, and potatoes, all contain a good quantity of lime. In addition to this, old mortar, pounded, should be at hand, and gravel stones in their natural state are excellent.

6. Hens must not be suffered to harbor lice, and they will have but few, if they have an opportunity to wallow in ashes—sand is better than nothing, but ashes are best. If the hen-house has not been attended to, it should be washed with strong lie—a syringe will soon do the job on extensive walls.

7. Good nests should be provided, and fresh hay or straw is always preferred by them.—They know enough to prefer new hay and new nests to one that has been occupied by a setting-hen.

8. A change of stock should often take place, and neighbors would do well to make exchanges every season. Hens will lay more eggs in a new home than in an old one.

9. All fowls require meat, and they will not long continue healthy without it. Save for

them, therefore, all the offal from hogs and cattle, and let it remain frozen till you want it.

In addition to the above, some experienced poulterers recommend keeping hens or pullets without roosters through the winter. N. Hardy, Esq. of Waltham, insists that pullets will lay twice as many eggs when kept by themselves as when roosters run with them; of this we have made no trial, but would recommend the experiment to others.

It remains yet to be proved that hens will lay as many eggs when kept confined as when suffered to roam abroad. We generally find that they will lay more eggs when at large; but this may be owing to their finding a greater variety of food. We hope more trials will be made by shutting up and furnishing all that may be wanted for health and for production.—We find in general that he who keeps a small number has more eggs in proportion than he who keeps a large flock: this may be owing to the more choice supply of food found by the small number.—*Massachusetts Ploughman.*

AGRICULTURAL SCHOOLS.

Mr. Rives, in his late address to the Agricultural Society of Albemarle, proposes the establishment of an agricultural professorship at the University of Virginia, and the Editor of the "Enquirer," who is almost as much devoted to agriculture as to politics, seconds the proposition, and suggests, in addition, the establishment generally of agricultural schools. He calls upon the Editors of agricultural papers and certain members of the Executive Committee of the Henrico Agricultural Society to lend their aid in furtherance of the design. This produced the following beautiful response from that distinguished member of the Committee, Gen. W. H. Richardson, which we transcribe from the columns of the Enquirer:

To the Editor of the Richmond Enquirer.

"Not having time to call on you this morning, I write to express my hearty concurrence in the suggestions thrown out in this morning's Enquirer, under the head of Agriculture.

"My consideration of the subject, as you may well suppose, has not been very profound, and I am sensible that the conclusions to which it has led, are very far from being entitled to much weight. I have long admired the plan of the celebrated Fellenburg, to which you refer; and thought, as I still think, that one such school would be worth more than all the professorships of agriculture that could be established in our colleges. If the agricultural portion of our people could be awakened to their true interests,

one such school at least could be established in each of the grand divisions of the State and sustained by individual subscriptions. Or, if not effected in this mode, and the financial condition of the State should not admit of the requisite aid from the public treasury, might not a tax be laid for that special purpose? It is difficult to estimate the advantages that might justly be expected from agricultural schools, in which theory and practice would go hand in hand, and where the mental as well as physical powers were judiciously cultivated. We all know, that the few landed estates which are yet left to be transmitted from fathers to sons, most frequently fall into the hands of young men just from college, who, though they may be fine scholars and qualified to attain the highest professional rank, are yet profoundly ignorant of that which it most concerns them to know—practical agriculture. So, too, of the less wealthy portion of our people, who train their sons to the labors of the farm, but most frequently in the same path, which has been trodden by fathers, grandfathers and great-grandfathers before them, but upon which not one ray of improvement has yet been shed. These young men are, according to circumstances, either portioned off with small farms, or seek employment as overseers, having, generally, little else than habits of industry, with true and honest hearts, to qualify them for the business of life. It is easy to conceive, that to all these, the education of an agricultural school would be certain independence, if not wealth.

"The want of sufficient skill in agriculture and farm management among overseers, we hear complained of by almost every farmer who employs one. It is a serious grievance; but the poor fellows themselves are not to blame, for they have no chance of better information. A case lately came to my knowledge of a lady, possessed of a good estate in land and negroes, who had been repeatedly disappointed in overseers, and at length employed one whose known industry and integrity it was hoped would suffice. But with a full stock of these indispensable qualifications, and every wish to give satisfaction, he proved so utterly ignorant of farm management, and of any standard of agriculture beyond that with which he had grown up—between the handles of an old style one-horse plough, with a wooden mould-board, and rope traces—that his employer has a certain prospect of loss upon the year's work, and he of losing his place. An experienced and observant farmer lately remarked in my presence, that many who were now struggling in the over-filled professions, and the uncertain risks of commercial pursuits, must soon find themselves driven to agriculture for a subsistence; and that, instead of every man who can command the means, sending his sons to fill the classical schools of the day, uncertain what they must

do when they attain to manhood, they should be (or a large majority of them) trained in schools of agriculture, which the public voice should compel the Legislature to establish.

"Agricultural schools should be alike accessible to rich and poor, and in the vicinity of flourishing towns, might, as you have suggested, to a considerable extent, support themselves. To the rich they would be scarcely less valuable than to the poor; as the first would there be taught how to improve and preserve his inheritance, whilst the last would learn how to acquire independence for himself and an inheritance for his children. Many farmers are most anxious to give their sons such an education; and even among the poorest and most ignorant, scarcely one could be found who would not cheerfully surrender the labor of his son for the advantage of placing him in an agricultural school. A very poor, but most respectable man applied to me early this year to take his son, a stout youth of sixteen, for five years, stating that he wished to make him a farmer—not to expose him to the vices of a town life—that he had nothing more to give him than he had already given, a plain English education—and as he hoped, good principles and good habits. It was not in my power to take the youth, and especially because I knew myself to be incompetent to teach him what his father wished him to acquire. Now, the labor of this son was worth something to the father, (a feeble man) but he was most willing and anxious to give that up, and even to permit him to labor on my farm with my negroes, for the advantage he supposed would be derived from my instruction. It was an overestimate of my qualifications—but serves to show the infinite importance to a large majority of our people, of agricultural schools.

"The press is the most powerful engine that can be brought to bear upon this important subject. I rejoice that you have taken it up, and hope that it will be pressed with your accustomed zeal — — —. I trust too, that it will be taken up by the press universally. Half the devotion to this great cause, that the political press bestows upon the party politics of the day, would do more for the best interests of Virginia, I verily believe, than any thing besides. Our Society, there can be no doubt, will do its part.

"This is not written for publication. I am not qualified to discuss the subject in the public prints, and therefore, do not wish to appear vain enough to attempt it. Abler pens and more distinguished names than mine must do the work; and it is time that work was in hand.—Let the word be onward.

Very respectfully, yours,

Member Agricultural & Horticultural Society of Henrico."

Richmond, Nov. 11, 1842.

To assist the press in doing the proper office,

claimed from it by our correspondent, we take leave to publish his own letter, though he warns us it is not written for the public. He holds, however, a strong pen—and gives us hard common sense—and his own production brings the "powerful engine," of which he speaks, to bear at once "upon this important subject."—*Editor.*

A deep and general interest in agricultural improvement has lately been awakened in this country. We begin to understand that from this great art all others have their life and being, and that nature and circumstances combine to render its pursuit the most eligible to the great mass of our countrymen. That the art is in a comparatively rude state, and that by a better direction of the same labor, the total of its products might be greatly increased, is universally admitted. Various plans have been devised for the improvement and instruction of the agricultural community, and it is upon this subject we desire to express a few opinions peculiar, perhaps, to ourselves, but in the soundness of which we have the most unshaken faith.

Education in this country is of too indefinite a character, that is, it is not sufficiently directed to particular pursuits. A boy is sent to school from the time he is old enough to wear breeches, until he is eighteen or twenty. He is taught to read English, to write an indifferent hand, to translate Latin and Greek, and being hurried around the circle of the sciences, he is dismissed upon the world, to get his living as he can; this may do well enough as a system of education for the privileged classes of England, from whom we have borrowed it; for those, who live upon the labors of others, it may be sufficient to induct them into those studies that please and gratify, whilst they certainly elevate and dignify the human mind; but in this country, where every man must work for his own living, something *more* is required. For all the practical purposes of life, there is not a more ignorant nor useless being, than nine out of ten of the young gentlemen, who have graduated at our universities. Let us trace the effect of this system of education in the active vocations of after life.—Law and politics are the only pursuits in which the talented youth finds his academical acquisitions of any practical use, and if circumstances deter from these, he is compelled, without knowing silk from satin, or unable, with all his *learning*, to keep a set of books, to become a *merchant*; or, more unfortunate still, he is driven to the profession of a *farmer*, without being able to distin-

guish a pick-axe from a grubbing-hoe. What is the result? Entering upon a profession of which he is wholly ignorant, he purchases knowledge at the expense of many disastrous failures, at all of which his uneducated neighbor turns up his nose, and exclaims, "so much for *book learning*;" and he is right, because, he means, so much for the want of practical knowledge.

There is no art, deserving the name, in which the genius and labor of ages has not been collected, and there is no art in which what is already known can be acquired, except by an apprenticeship of years. Nor is there any art or profession, except that of agriculture, the most important and the most profound of all, in which this principle is not recognised; even the *merchant*, generally, serves an apprenticeship, as a clerk. *Nascitur, non fit*, is made to apply to farmers and poets, alone.

Is not this fact sufficient to account for the relative depression of this noble art? How then shall we elevate it? We answer by bestowing agricultural educations upon those intended for its pursuit.

Every profession may be divided into two branches. One consists in a knowledge of the rules to be observed by those engaged in the practice of the profession, the other comprises the course of reflection and observation, by which those practical rules are deduced. In different professions, these two branches are more or less united. Whilst in the art of statesmanship they are intimately and inseparably connected, in many of the mechanic arts they are entirely separated. The iron turner is perfectly ignorant of the rationale of the engine he is building, while Watt was probably unable to fit a screw in the metallic stave his vast genius had originated. The very merchant makes daily use of formulæ obtained by the unknown calculations of the mathematician, and in all professions that are not purely mental, a knowledge of results is one thing, and the rationale by which those deductions are obtained is another. Now it seems to us that the advocates of agricultural improvement frequently forget this important distinction, and never remember that the operators should be to the theorists, or deducers, as a thousand to one. They would initiate all into the *rationale* of the rules of his art, this is neither practicable nor desirable, and by grasping at too much, we lose all. We, therefore, desire to see not only a professorship to teach the *science* of agriculture,

or rather so much of it as has yet been established, but what we believe would be infinitely more valuable, the establishment of schools in which the *practice* of the art may be taught.—If mathematicians have worked out the best curve for a mouldboard, tell your pupil what it is, without troubling him with the calculations by which it has been obtained; if Liebig has made wonderful discoveries in organic chemistry, instruct him in the *practical results* to which they have lead, without burdening him with the scientific theories from which they have been deduced; and when no practical result is deducible from a theory, no matter how pretty, or how ingenious it may be, bother neither him nor yourself with it. Above all, teach him habits of system and industry, and make him personally familiar with the operations of the mechanical implements of his profession. This homely, plain, and practical information is what is needed by the great mass of our farmers, whilst the general object seems to be to stuff them with *science*. As well might you attempt to teach a boy to read, before he had learned his letters.

As to the establishment of private schools of agriculture, we hardly think the day has arrived when the pioneer in such an undertaking would find his pecuniary advantage in it; but for our *public* schools, we would propose such a system as the following:

Let competent teachers be provided in every district, and suitable land and buildings be obtained at the expense of the State. Boys should be admitted from twelve to fifteen, to remain six years, the only qualification required being fair moral character and the capability of spelling in two syllables. Three hours every day should be devoted to the acquisition of a plain English education, and seven more to practical instruction in agriculture or some of the mechanic arts; the product of the labor of the pupils to be devoted to the support of the establishment. Appoint an Inspector General, and take care that he is just the right sort of man, whose sole business it shall be to visit and superintend all of these institutions, and report to the Legislature the manner in which they are conducted.

This would be very much upon the principle of the celebrated school at Hofwyl, established by that distinguished philanthropist, M. Fellenberg. If we had space we should like to con-

trast the proposed with the present miserable system, if it deserves the name, that now obtains in Virginia. To make any thing of him, the teacher must have the entire control of the pupil; his studies must be conducted regularly and systematically, and the present arrangement, by which the parent sends his son to school, just when he has no other use for him, is the most useless and extravagant that can be imagined. Again, the honest pride which refuses to be the object of charity should be respected and encouraged. The character and dignity of a being, who had worked out his education by the sweat of his brow, would be as superior to that of a common charity boy, as the independence of a freeman is to the servility of a slave.

Is there a greater demand for any class than for that which, after the first six years, would be annually turned out from these institutions? We verily believe they might be made to constitute the most valuable citizens in the Commonwealth.

Is there a man in the State who does not prefer the general principles of the plan proposed, to the present common school system?

Is there a *poor* man, especially, who will not devote himself, heart and soul to the establishment of a system, which is to elevate his children from the weak and grovelling condition in which ignorance holds them; which offers to his offspring a sure and honorable passport to the condition of useful, valued, and respected members of society?

What say the people of Virginia? What say the press of Virginia? Will they take up the subject in earnest, consider, reform or extend the plan proposed, and unite their efforts with ours in bringing it before the present Legislature?

From the Nashville Agriculturist.

PUMPKINS.

Early in April I ploughed a small field, deep and close; threw about eight buck-loads of barn yard compost broadcast to the acre, and forthwith planted pumpkin seed at five feet distance in checks. I cultivated as corn until the middle of May, when the ground was pretty well covered in the more luxuriant spots with the vines. I then took hoes in hand and planted, in the replanting manner, corn in each pumpkin hill—the corn having remained in soak forty-eight hours. It came up at once, grew off kindly,

and yielded a fair crop of corn—no vacant rows—corn in all.

Previously the pumpkin vines got such a start they were not checked by the growth of the corn, and now exhibit a small field more abundantly bespeckled with pumpkins, than any I ever saw by fourfold. My neighbors seldom pass without inquiring how I raise so many pumpkins and a fair crop of corn together? I tell them frankly the mode of culture, and the pumpkins show the result. I am astonished at my success; my little field—I ought to call it patch—is the admiration of all, and if this short account of the matter should be the means of helping my brother-farmer to a like success, the end in view is obtained.

PARVUS AGRICOLA.

Wilson County, September, 1842.

For the Southern Planter.

Messrs. Editors,—The accompanying certificate shows the weight of two hogs of Mr. Dickson's *white* stock. They were the refuse of a litter of eleven, pigged the 9th April, 1841, being apparently runts. The other nine were fine pigs, and were slaughtered for pork in December, 1841, when eight months and nine or ten days old. These two were then so inferior that I considered them of little value and did not attempt to fatten them. They have had only the ordinary farm keep until November last, when they were put up to fatten, and slaughtered on the 14th—being twenty months and five days old.

WILLIAM H. RICHARDSON.

The above mentioned hogs were weighed by me this day; one weighed 240, the other 275 pounds, neither of them very fat; had they been made fat, one would have reached upwards of 300—both of them were very lengthy and deep.

W. MILLER.

December 15, 1842.

HOW TO FATTEN A HEN.

Friend Paine Wingate says his experience tells him that the following process is the best mode of fattening hens. Shut them up where they can get no gravel. Keep corn by them all the time, and also give them dough once a day. For drink give them skim milk. With this feed they will fatten in ten days. If kept over ten days they should have some gravel or they will fall away.—*Maine Farmer*.

QUERIES.

To the Editors of the Southern Planter:

Gentlemen,—A neighbor of mine who has been cultivating and improving two fields for

some ten or twelve years has used plaster very freely every time he has sown clover upon them, and will continue the free use of it as long as he lives. Now I wish to know if there is not some danger of applying this substance to an injurious extent.

Is there not some land which is by nature sufficiently calcareous? land, for instance in the limestone countries which cannot be improved by the additional application of lime in any form.

I request that some of the scientific readers of the "Planter" will afford the information required for the benefit of many a

RUSTIC.

Henrico, December 12, 1842.

TO HOUSEWIVES.

Recent experiments in more than one family in this city, says the Delaware Gazette, have established that the plant known to botanists as the *Polygonum punctatum*, commonly called water pepper, or smart weed, and which may be found in great abundance along ditches, roads, lanes and barn yards, is an effectual and certain destroyer of bed-bug. It is said to exercise the same poisonous effect on the flea. A strong decoction is made of the herb, and the places infested with the insect are carefully washed therewith. The plant may also, with much advantage, be strewn about the room. Elderberry leaves, laid upon the shelves of a cupboard, will also drive away roaches and ants in a very short time.

For the Southern Planter.

Messrs. Editors,—In laying off corn rows parallel with hill-side ditches, or horizontally, where there are no ditches, I have found a very simple contrivance, somewhat like a gig-whip, answer an admirable purpose. Take an old-fashioned whip-staff, such an one as our fathers drove with, and if such can't be found in these days of improvement, make one of white oak, four, five or six feet long, according to the distance designed for the rows, and to the little end of it, instead of a lash, attach half a dozen links of small chain or a heavy piece of leather about a foot long. The other end of this staff must be fastened into a piece of timber about a foot long, an inch thick, and two inches wide. In the beam of the plough, on top near the handles a hole must be mortised for the reception of one end of this piece of timber. As the plough passes on, this chain or leather falls into the ditch or a furrow previously run, if there be no ditch. On reaching the end of the row, the ploughman lifts up this instrument and whilst the horse is turning round, turns it round also. As he returns the chain falls in the furrow just made,

and so on. The piece of timber must fit loosely in the beam, that it may be changed about easily.

Yours, respectfully,

P. B. W.

Nottoway, December, 1842.

From the New England Farmer.

RED OR BLACK ANTS.

Take a few sprigs of green wormwood, and place them in immediate contact with red or black ants, and they will disappear. I have found this to be effectual after using every other remedy within my limited knowledge.

Another remedy is to sprinkle chalk around the places they frequent. It is said the chalk will cause them to make their exit, but I have not had occasion to prove it.

G. C.

From the Philadelphia Saturday Courier.

STALL-FEEDING.

Directions to Stall-feed Cattle—read before "The Philadelphia Society for Promoting Agriculture," June 1, 1842, by James Mease, M. D., Vice-President.

1. The subjects on which it is intended to lay an extra proportion of fat, must be in good condition when put up—otherwise they will not pay for the cost, feed, and care.

2. Give one handful of fine salt three times weekly to each beast.

3. The hay must be of the first cutting, (if clover) and well cured—that is, not left before cutting, in the field, until the stems are deprived of all nutritious moisture, the leaves and blossoms turned black, and when cut, turned dry after day in making, until they fall off from age, and exposure to the sun, and probably a rain or two. These consequences (the last excepted) are the invariable result of sowing timothy with clover seed; for the first grass does not attain its full growth until two weeks after the latter is fully ripe, and farmers almost always refuse to cut the crop until timothy is fit to mow.—The union of orchard grass with clover, does not admit of the objections to which the first combination is liable, for both progress equally to maturity, and if cut when in full blossom, and not kept too long in the field, make a hay which cannot be exceeded. Hay should be given thrice daily, and no more put in the rack at a time, than the animals will eat before their next allowance, as they become fastidious by confinement, and will refuse hay upon which they have often breathed, and which is also impregnated with the confined air of the stable.—At night, enough must be given to last until the morning, and the remains of the former supply at all times taken away, to give place to a fresh one.

4. Water is to be given twice a day, and, if convenient, the animals may be walked to the spring, creek, or pump. The exercise will amuse them, promote their appetites, and aid of course the object in view.

5. After their hay is eaten, give from ten to sixteen quarts of Indian corn and oats ground together, to each head three times daily during ten days; then half a peck of boiled mashed potatoes, with a handful of corn meal sprinkled over them. The water in which the potatoes have been boiled must be thrown away, as I know it to be hurtful to animals. In a week, a change may be made of chopped pumpkins, or sliced Swedish turnips, or sugar beet, for the potatoes. The new food will invariably encourage appetite, unless in the event of an aversion to some one article, for which no cause can be assigned. Indian corn meal, with or without oats, must be the never-failing accompaniment of any other food.

6. Great care must be taken to watch the appetite of the animal, so as never to cloy it; otherwise, time will be lost. He must on no account be over-fed—and to avoid this, during the occurrence of an increase of temperature in the air, (or “a warm spell,”) which takes place almost every winter, the usual allowance must be diminished. The farmer should take the alarm the hour that he sees the animal leave any of his usual allowance in the trough or rack, clean out both, and by a daily walk, extra carding, and, if necessary, a dose of Glauber salts, try to restore the appetite.

7. The food, other than hay, should be given in a box and in the trough alternately, which should be daily washed or dry-scrubbed, and scraped, to prevent the remains of a former mess from turning sour, which will infallibly disgust the ox. This was the uniform practice of that first rate farmer, Joseph Cooper, of New Jersey, who urged its adoption upon the writer, as one with the importance of which his own ample experience had fully impressed him.

8. Flaxseed jelly, with corn meal, is of service occasionally to soften and loosen the skin, and produce that “kindly feel” in it which the great English improver Bakewell, ranked as an essential point in the choice and feeling of cattle; meaning thereby a “mellow, soft feel, yet firm to the touch, and which is equally distant from the hard, dry skin peculiar to some cattle, as it is from the loose and flabby feel of others.”

9. Carding the animal thrice daily with appropriate cards is an all-essential part of the process. The operation is highly grateful to the animal, and its effects eminently salutary. It promotes the action of the small vessels on the surface, and the muscular fibres, which sympathise and act indirectly upon the stomach.—Medical men are well acquainted with the intimate connexion subsisting between the state of

the human corporeal surface, and the stomach and viscera connected with digestion, and the same connexion is observed in the ox when feeding.

10. Regularity in the hours of feeding and watering is essential.

11. Cut straw, free from mould or smell, may be given once a day, by way of a change, slightly sprinkled with corn meal and salt. It will be eaten freely. The stable should be well ventilated, if possible—for the more pure the air, the more keenly will the animals eat. The utmost attention must also be paid to cleanliness. The animals must not be permitted, when leaving the stall to drink, to walk through a yard covered with wet manure, and to return to their stall with the clefts of their feet filled therewith—for, owing to the acrimony of the liquid, a sore therein will be the almost certain effect, with a consequent loss of appetite. This cleft must be occasionally examined in both oxen and sheep, and if found sore, should be washed with soap and water, when the application of a dossil of tow, dipped in spirits of turpentine, morning and evening, for three or four days, will remove it.

12. Clean bedding is a point obvious to all.

SOAKING CORN TO FEED HORSES.

One of the best farmers in the vicinity of Baltimore, saves one-third of his corn, by soaking it before he feeds it to his horses. He places two hogsheads in his cellar, secure from the frost, and fills them with ears of corn, and pours on water to cover it. When well soaked, he feeds it to his horses, and when one cask is empty, he fills it again and feeds from the other. By the time one is empty, the corn in the other is well soaked. The cobs are so well soaked that the horses eat the whole, and they require only two-thirds as much corn when prepared in this way, and there is no doubt that this preparation and the eating of the cob with the corn, renders the food more wholesome.—*Farmers' Journal*.

For the Southern Planter.

MUD.

Messrs. Editors,—In the last number of your valuable Planter “A Subscriber” seems to be incredulous as to the good effects of river or swamp mud as a manure. I will offer my mite in its support. Some twenty years ago, I was anxious to enrich a piece of poor land, and thought I was without means to begin, but my attention was drawn to a piece of swamp or mill-pond land I had not long reclaimed, and I determined to try the mud thrown out of the ditches. Having an uncle, in whom I placed much confidence as a farmer, as well as otherwise, I consulted him upon the subject. He was of the opinion

of "A Subscriber," that it was of no value. He had made an experiment some ten or fifteen years previous, and found it perfectly worthless. I inquired of him how he managed it, and at what season of the year he got out the meadow mud; his reply was, "in the summer, and I immediately ploughed it in." I was not satisfied, and determined to try for myself. I accordingly did so, and found it to be extremely valuable—and if I had a plenty of it now, would think my time well spent in using it.

My mode of management was to scatter the mud some four or six weeks in the winter, before ploughing it in, so as to let the rains and frosts melt and pulverize it well; if "A Subscriber" will try some 150 or 200 loads of ten bushels to the acre this winter, and does not see a *very great advantage* arising from it, then I will acknowledge to him *whenever* we meet, that I am no farmer. I have not undertaken to solve the "mystery" but given him facts.

I would advise "A Subscriber" to haul his bog mud, &c. into his farm pens, and mix it with leaves, pine trash, &c.—a layer of each alternately. Let the stock dung it well, and if convenient, give a dressing of marl and clay.—Before getting it out, rick it some four or six weeks with *new* stable manure; he will find he has a valuable compost in the spring. I consider bog mud of but little value to get out on the land alone; it is too light and spongy. I have given it a trial several times to very little advantage. While writing, I will say to Mr. W. M. Peyton that we have never in this section of the country used plaster on our wheat, and are subject to the rust three years out of five.

I am, gentlemen,
Yours, respectfully,
T. M. S.

Marlboro', Gloucester Co. }
Nov. 26, 1842. }

In connexion with the above, we subjoin the following extract from a letter received from Mr. Robinson, of King & Queen:

"The mud of the Dragon Swamp, when hauled out upon the high land, is very valuable, and when I was a boy Mr. Thomas Fauntleroy, by the use of mill-pond mud, made a very poor field produce the best wheat of any land in ten miles of him. I have tried marsh mud after the salt tide was taken from it five years without effect, whilst the mud from an ash-sapling swamp, at the head of the tide water in a state of nature, was very beneficial.

"Col. Spencer, of this county, tried the embankment of a reclaimed marsh about eight years after it was thrown up, with very decided effect on both corn and wheat."

PROPAGATION OF MENTAL PECULIARITIES.

It is stated that one of the fine deer hounds in Richmond park, instead of seizing the deer by the ear or neck, as is usually the case when they stand at bay, always takes it by the skin of the forehead, between the antlers—a difficult place to hold it by, and one of peculiar danger to the dog. On slipping a puppy of this particular hound at a deer for the first time, when it was only nine months old, it immediately seized the deer, when brought to bay, in the same manner its mother had done, and still continues to do so.

For the Southern Planter.

Lake C. H., Indiana, Dec. 12, 1842.

In the letter of friend Botts, in the November number, there are some remarks upon his visit to the farm of Mr. Cushing particularly worthy of notice.

The spirit which prompted Mr. Cushing, a wealthy East India merchant, in his retirement from business, to select a sterile spot in the country, and spend his surplus wealth in making it bloom and blossom in beauty, is worthy of all commendation.

What a pity it is that hundreds of the wealthy cits of our large towns, would not go and do likewise, instead of hoarding up their capital in the vaults of some bank, or other shaving shops, the great amount of benefit to society, derived from their operations, consisting in the patronage that they bestow upon paper mills and engravers.

At present, the height of ambition in a retired city merchant, seems to be to get a few miles out in the country and build a palace by the side of some great thoroughfare, or upon a naked hill-top, where it will catch the eye and admiration, or excite the envy of the passer-by; where he lives upon the proceeds of his bank stock, etc. instead of devoting his wealth to the actual improvement of the agricultural condition of his native or adopted country; and actually creating happiness for himself and all around him, like your friend in his James River paradise.

True, we have no right to question, or "fall out with the taste" of any individual, as to the manner in which he shall spend his money, yet we have a right, nay a duty, to point out a way in which it can be done and produce a greater blessing to a greater number.

What noble monuments of fame the retiring merchant might raise to himself, if, when he retires from business, he would select some barren spot, like our friend Bement, for instance, and like him, set an example worthy to be followed in all similar situations. Instead of creating a

splendid mansion only for show, he might create fertility where all was barrenness, and add to his own wealth, while he bestowed comfort and happiness upon those he would employ in cultivating his land. Besides he might by his ability and means, show to the poorer class of cultivators by whom he might be surrounded, numerous experiments and improvements in the science of agriculture.

Let us then try to create a taste and fashion, for that is the despotic rule, to induce those retiring from city life, to settle in the country and devote themselves to agricultural pursuits; instead of a life of idleness, ennui, and miserable existence, for want of something to engage their minds upon, as we know is the case with the

habitants of many of the "beautiful mansions" which we see in the suburbs of every city.

I have the pleasure of writing myself your friend,

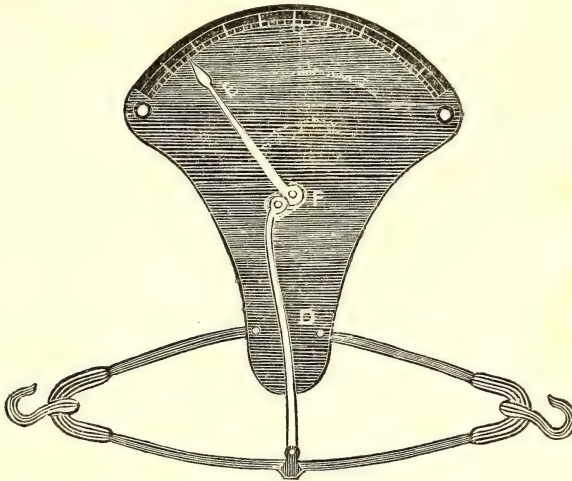
SOLON ROBINSON.

NOTE.—We have had the beginning of a severe winter. The last half of November very cold, and good sleighing, which is an uncommon thing in this latitude, which is $41\frac{1}{2}^{\circ}$.

Agricultural productions all extremely low—our market is Chicago, on Lake Michigan, and thence to New York or Canada.

Wheat 38 a 45 cents; Corn 16 a 18 cents; Oats 10 a $12\frac{1}{2}$ cents; Pork 1 a $1\frac{1}{2}$ cents; Beef $1\frac{1}{2}$ a 2 cents; Tallow 6 cents; Lard 4 a 5 cents.

DYNAMOMETER.



We have been frequently asked what a Dynamometer was, and we have concluded to illustrate the explanation with an engraving. The word literally means a *measurer of strength*, and it has long been employed to test the extent of muscular power. The implement is made in various forms, which are all modifications of the one represented in the engraving. It will be readily understood that any force applied at either end of the elliptical spring, the other end being stationary, will by compressing the spring cause the lever (D), to give motion to the index (E), the lever and the index being both fastened to a small plate, which revolves on a pin at (F).

To such perfection has that invaluable implement, the plough, been brought, in the execution of its work, that the great contest now amongst

the manufacturers is to furnish the plough that will do its work with the least draught; this is a point of the greatest importance to the farmer, and only secondary to the quality of the work. To ascertain the ease of draught, is then the great object of the dynamometer. One end of the spring is fastened to the plough whilst the other is attached to the team; the force exerted is indicated by the movement of the index through the scale.

This implement answers very well for the purpose for which it was originally intended, viz. to ascertain the power of animal muscle when exerted against a fixed and immoveable object; but here the object is to ascertain, not the power of the team, but the resistance of the plough. This resistance varies with the move-

ment of the implement, and is much greater, from a greater impediment, at one moment than another. Thus a plough of the easiest draught, by the intervention of some obstruction in the earth, may momentarily press the index to the highest point on the scale; it is, therefore, necessary to ascertain how long the index stands at each point of the scale, that we may compare the average force required by one plough with that of another, employed in turning over two pieces of ground similar in nature and extent. The ordinary dynamometer affords no opportunity of making such an estimate; for it is utterly impossible to watch and record the vibrating motions of the index: therefore, so imperfect is this implement as at present constructed, and so evidently fallacious is the test it affords, that we should have hardly considered it worthy this notice, if we had not had it in mind to make a suggestion, that may lead some mechanical genius to overcome the difficulties we have mentioned. It seems to us that to the index might be affixed an apparatus, similar to the one-half of an hour glass, supposing it to be cut in two at the centre. This should be filled with sand, and the aperture at the small end stopped until the force was applied. This apparatus, with the small end downwards, should then be affixed to the index in such a manner as to move with it. The scale should then be laid off into minute divisions immediately under the segment described by the mouth of the glass in the movement of the index; with these divisions might be connected little drawers for the reception of the sand dropped into them from the glass. It will be readily perceived that the quantity of sand in a division would intimate how long the degree of force it represents had been exerted. There might be some difficulty in estimating *very accurately* the quantity of this sand, but a little ingenuity we believe would overcome this difficulty. To make the test, even when perfected as we have imagined, an accurate one, it is necessary that the motion of the ploughs should be the same. This might be, in a manner, secured, by using the same team to both, but a much more certain plan would be to rig a capstan to be worked by hand.

Any mechanic, who will construct an implement that will furnish a thorough test of the draught of ploughs, will confer a great favor upon the agricultural community, and will certainly afford them what they have not at present.

FRUIT.

Nothing strikes us with more astonishment than the superior attention paid to the cultivation of fruit, at the *North*. There, the most careful planting, the highest cultivation, and the most judicious pruning are bestowed upon a tree, destined to yield them a poor, sorry, tasteless peach, that never knew a "sunny side," whilst, here, where nature stands ready to second the efforts of the husbandman in producing the richest and most luscious fruit, nothing is done. Indeed, ever ready to find excuses for our own errors, it is gravely asserted that the southern climate is not adapted to the production of fruit. How often do we see farmers, liberal in their expenditures, laying out hundreds of dollars in luxuries for their families, that are not really half as grateful to them as the constant supply of delicious fruit he might afford them by a much smaller annual expenditure. There is no acre upon the farm so profitable, if money is valued for the comforts and gratification it will procure, as the garden and orchard, especially if your wife and children are fond of fruit and vegetables, as wives and children, and for that matter *husbands* too, generally, are. Reckon the cost of a fine dish of strawberries, and then see in what other way you can as well bestow your money.

As to the idea that any fruit is better at the North than the South it is all a mistake; the powers of nature can be only partially substituted by the tenderest cares of man, and the want of flavor in the more delicate fruits is readily detected by every southern palate. The Jersey peach is fair to look upon, but, like many another glittering exterior, it offers promises that are never realized. The northern men begin to understand this, and a gentleman in Philadelphia informed us, that, during the last season, peaches from Norfolk, owing to the great facility of communication, were brought perfectly fresh into the markets of Baltimore, Philadelphia and New York, and that the *Virginia* fruit was eagerly sought for, not only on account of its forwardness, coming into market two or three weeks before the Jerseys, but also for the sake of its peculiar and delicious flavor. By the bye we know no better investment than may be made in the light lands about Norfolk, to be devoted to the growth of fruit and vegetables for the northern markets. They can be delivered in Philadelphia even, the day after they are ga-

thered, and one gentleman, from Norfolk, informed us that he had, during the last season, sold the produce of a little place hardly more than a "truck patch," for \$2,500, to a man, who came and gathered it for the Baltimore market.

With respect to apples too, the very best pip-pin we know, is grown in the county of Albemarle. Those who buy and sell are the best judges of an article, and our next door neighbor, Mr. BONAVITA, tells us, that he will pay fifty cents in the barrel more for the Albemarle pip-pin than for any northern apple he can get. The truth is, the flavor of southern is incomparably superior, as well it may be, to northern fruit, and yet thousands of dollars annually pass out of this State for northern apples. Our farmers are not aware to what an extent the apple business is carried. American apples are now exported to every part of the world, and we understood that one merchant in Boston, alone, was desirous to contract for thirty thousand dollars worth of apples.

We hope these remarks, which apply with even greater force, perhaps, to our friends farther south, will have the effect of arousing attention to a subject now most woefully neglected.

TO ERADICATE CORNS.

Take a small piece of flannel which has not been washed, wrap or sew it around the corn and toe. One thickness will be sufficient. Wet the flannel where the corn is, night and morning, with fine sweet-oil. Renew the flannel weekly, and, at the same time, pare the corn, which will soon disappear.—*Leeds Intelligencer*.

NEWSPAPER LAW.

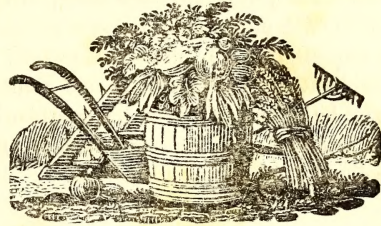
The law is, and so the courts decide, that the person to whom a paper is sent is responsible for the payment, if he receive the paper or make use of it, even though he never subscribed for it. His duty in such a case is not to take the paper from the office or place where it is left, but to notify the publisher that he does not wish it. If papers are sent to a post office, store, tavern, or other place, and are not taken by the person to whom they are sent, the postmaster, store or tavern-keeper, &c. is responsible for the payment unless he immediately gives notice to the publisher that they are not taken from the office or place where they are sent.

Extract from the Post Office Regulations, page 50, section 118:—"In every instance in which papers that come to your office are not

taken out by the person to whom they are sent, you will give immediate notice of it to the publisher, adding the reasons, if known, why the papers are not taken out."

BERKSHIRE AND OTHER IMPROVED HOGS FOR SALE.

Several pairs of superior Berkshire Pigs by the fine Boar Chesterfield. Two young Berkshire Sows, which will be stunted to the same Boar previous to selling. Also the finest Pigs of other approved breeds. All at reduced prices. Apply to the Editors of the Southern Planter.



OUR THIRD VOLUME.

We are happy to greet so many of our old acquaintances, who have already renewed their subscriptions to the *PLANTER*. Notwithstanding our large increase during the last year, and the consciousness of having labored diligently to deserve the patronage bestowed upon us, the extreme hardness of the times, and the fall of cotemporaries around us, caused us to look forward to the taking up of a new subscription with fear and trembling. The staunchness of our friends has, in a great measure, relieved our anxiety, but we have received the adieus of many old and valued acquaintances, some of the very earliest subscribers to the paper. In every instance, we have parted with feelings of the most cordial kindness mutually cursing the "times" which separated such good friends.—We have never received more high wrought encomiums than have been bestowed upon us by individuals requesting us to discontinue the paper; we were much flattered by their estimate of the work, and only regretted that it did not quite equal their esteem for a dollar.

We once thought it impossible that there could be a man in Virginia, who could read and write, that could not afford to pay a dollar for a paper devoted to his profession; but we are now satisfied that there are many zealous and spirited farmers, who feel it their duty to confine their expenditures to the absolute necessities of life; from such we part with great reluctance, hoping that more propitious times will soon justify a renewal of acquaintance.

Those who know any thing about our matters, know, that we have never received any

thing like a compensation for our services. Of this we do not complain; for although our list is too small to render the profits of the paper an object, we have been contented if we could *live* through these times, seeing our reward through the vista of the future. That we have profits at all, is something to brag of, but now that they have to be divided between two of us, we hope at least they will not be lessened. We think we may say, without arrogance, that Virginia is deeply interested in sustaining the **PLANTER**, and that we are justifiable in respectfully urging our claims upon every farmer in our own state, at least. We have, therefore, inclosed to each of our subscribers a prospectus, with a request, that he will treat it exactly with the consideration to which he thinks it entitled: if he can, by circulating it in his neighborhood, obtain a few additional names, we shall be gratefully obliged to him for his kindness.

LAND AGENCY.

We have so many applications from persons desiring to buy and sell farms, especially the latter, that we have concluded to undertake an agency for the purpose. If any individual having a tract of land for sale, will send us a plat and description thereof, we will register it and exhibit it in our office, we will advertise it and communicate it personally to persons desiring to purchase, and do all in our power to further his views.

Purchasers will naturally resort to an intelligence office where such facilities are afforded, and we have no doubt the arrangement will prove equally acceptable to the two great classes of buyers and sellers; but it must also be made profitable to us. We will, therefore, require every person desiring our assistance in selling his land, to pay us an unconditional fee of ten dollars, in advance, or a contingent fee of fifty dollars when the land is sold, provided that a sale is effected at any time within six months from the date of the application.

ENGRAVINGS.

There is no portion of our work that gives us more trouble than the selection of proper subjects for engravings. We would have no difficulty in furnishing a plenty of embellishments; but we are anxious to give our readers three or four cuts in each number, which may not only gratify a childish curiosity for pictures, but af-

ford them real and valuable information upon the subject of their profession. We will, therefore, be much obliged to any of our friends, who will forward us a sketch, with an intelligible description, of any implement, or fixture that is of a novel or interesting character. We will have it engraved, and thank them for their pains.

THE SIXTY DAY RULE.

Be it known to all whom it may concern, we shall rigidly enforce our sixty day rule; that is to say, our terms emphatically, are, as advertised; one dollar and fifty cents per annum, payable sixty days after the date of subscription, or *one dollar* sent free of postage *within that period*, at the option of the subscriber. We greatly prefer the voluntary payment of the dollar, but if a subscriber chooses to delay it for sixty days, that is his business, not ours. We make these remarks, because *one* gentleman was so unreasonable as to complain when we sent him a bill for one dollar and fifty cents, the sixty days having expired by more than a week.

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AGRICULTURAL AND VARIETY STORE.

The Subscribers, in connection with the Planter, have opened an Establishment in the City of Richmond, to which they would call the attention of FARMERS and HOUSEKEEPERS in general. They have made such arrangements at the North and elsewhere, as will keep them constantly supplied with the latest and best improvements in the following articles:

Ploughs, Cultivators and Harrows

Corn Shellers and Straw Cutters

Seed Sowers and Cob Crushers

Horse Powers and Threshing Machines

Wheat Fans, Axes and Hoes

Spades, Shovels, Forks and Rakes

Pruning Instruments

Seeds, Garden Tools, &c. &c.

TO THIS THEY HAVE ADDED

A HOUSEHOLD DEPARTMENT,

Comprising a large assortment of

Mats, Brooms, Brushes, Pails, Measures, &c. &c.

They have determined to sell their Goods for nothing but CASH; consequently they can be satisfied with very small profits, and having laid in their Stock upon the most favorable terms, it will be a matter of astonishment to those who can start a little money and will give them a call, to find the difference in prices effected by the Cash System.

Many of the articles are of a novel character, and such as have never been offered in this market before.

BOTTS & BURFOOT.

TREES, FLOWER ROOTS AND SHRUBS.

The Subscribers have undertaken an Agency for the Nursery of the celebrated Landreth, of Philadelphia. They will fill any order for FRUIT TREES, FLOWER ROOTS or SHRUBS, with the very finest and choicest specimens of these articles. Their arrangements are made for the most careful and particular selection of each variety: the price consequently will be a trifle greater than that usually demanded, but the article will be warranted superior in every respect.

BOTTS & BURFOOT.

POUDRETTE.

We saw and heard so much of this article at the North, that we determined to give our Farmers an opportunity of testing its value. Accordingly, we sought and obtained the Agency of the New York Poudrette Company, and we are now prepared to furnish the article at the New York retail price, with cost and charges added.

BOTTS & BURFOOT.